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OF INTERORGANIZATIONAL SERVICE DELIVERY SYSTEMS

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The development of the study of organizations has progressed from analysis at the intraorganizational level to the interorganizational level and recently to the level of the organizational network or field. At each level, organizational theorists have observed emergent properties not present at the previous levels. The most noticeable demarcation is between the intraorganizational and interorganizational levels of analysis. Litwak and Hylton (1962), and Clark (1964) have proposed that the principal difference between interactions within organizations and between organizations is the absence of a common authority structure for coordinating activities and mediating conflicts at the interorganizational level.

This fact has significant implications for the study of public organizations. The problems caused by the lack of coordination between and within systems of organizations designed to deliver services to the public are legendary. Their pervasiveness has been underscored by the former Under Secretary of the Department of Labor, Max Lovell. "We still have a cumbersome network of channels administering fragmented, overlapping and sometimes competitive programs, often with gaps served by no programs, and without clearcut allocations of responsibility of sufficient flexibility to reform itself." (Quoted in Aldrich, 1972)

Instances of these problems have been widely documented and analyzed by researchers in several fields. An examination of the relevant literature produced numerous case studies of isolated attempts at interorganizational coordination between local public agencies. Most of these accounts were descriptive in nature and rarely did the investigators make prescriptive statements beyond pointing out how the weaknesses of the particular collaborative venture might have been avoided. In addition, there have

been two significant attempts to develop models for facilitating inter-organizational coordination (IOC). Warren concludes his article, "The Interorganizational Field as a Focus for Investigation", (1967) with a model for interorganizational decision making in the community arena. Jerald Hage (1974) has developed a more detailed model for coordinating the activities between a specific group of organizations which provide services for the mentally retarded (MR). This model grew out of his study of demonstration MR delivery systems in 5 cities.

The purpose of this paper is to glean from these case studies, models, and other relevant literature material to build a general model which can be used by administrators of public service programs as a guide for more rationally designing IOC delivery systems. This model will be general in the sense that it can hopefully be applied to all cases of IOC, given a knowledge of the constraints or contingencies within a particular context. It will not be general in the sense that one plan can be used for all situations. Indeed, the principal assumption upon which this paper is founded is that the design of a specific IOC delivery system must be contingent upon the parameters within which it is to be established.

In this paper rational is defined as a conscious act by administrators to weight the pros and cons or, if you will, to minimize the cost (or negative consequences) and maximize the gains of a proposal. Clearly there are trade-offs to any decision. Our purpose is to highlight for program administrators the factors which previous studies of IOC systems have shown to be important, and which therefore should be included in their decision making process. To do this we will follow a problem/solution format, i.e., we will first outline the problems which previous

IOC efforts have encountered and then suggest possible general solutions for these problems. Next we will isolate the most important contextual dimensions within which IOC delivery systems are likely to operate, and then finally we will attempt to identify which of the potential problems are likely to be actual problems within the various contexts and demonstrate the ability of the contingency approach to provide administrators with decision rules for resolving the dilemmas encountered as they endeavor to design problem free systems.

Before we begin, however, a short caveat is necessary. A discussion of delivery systems presupposes a common definition of the systems being discussed, but unfortunately this agreement has not existed heretofore in much of the interorganizational literature on the topic. There are two principal criteria which one can use to specify the organizations to be included in an IOC system: 1. population characteristics, or 2. vertical systemic linkages. We identify a population by the common phenotypic characteristics of its members, e.g., all kangaroos. However, for our purposes we are only interested in the kangaroos who are occupying the same ecological niche. At the organizational level this guideline would mean that an IOC system would be composed of organizations with a common function (e.g., manpower, health) and/or a common client population (e.g., youth, mentally retarded) in the city of Middletown. If these organizations initiated a program to coordinate their activities it would be in response to a common felt need, rather than the behest of a common sponsor or funding source.

Conversely, system theorists like Miller (1955), Bertalanffy (1968), Parsons (1966), and Bateson (1972) define systems in hierarchical or

vertical terms. They consider each system to be a sub-system in a larger more encompassing system, which is in turn a sub-system, etc. This perspective would dictate that the organizations to be included within an IOC system would all be agencies within a given federal, or corporate organization, in a given geographical area, e.g., all Department of Labor programs in Middletown. Concern for coordination within this system would generally be a product of the parent agency's desires for common accounting practices or a more standardized or efficient delivery mechanism.

These two different definitions can be diagrammed as shown in Figure 1. The need to make explicit the presence or absence of vertical ties among the organizations being coordinated will be highlighted at several points in the remainder of the paper.

Insert Figure 1 here

Returning now to the outline of the paper, the need for a contingency approach to IOC can be illustrated by briefly comparing the models proposed by Hage and Warren.¹ The recommendations made by the two authors are qualitatively quite different. Much of the reason for these differences becomes apparent when we consider the type of organizations to be coordinated in the two models, the needs to be met by the proposed coordination efforts, and the authors' assumptions about the basic nature of organizations.

To begin with, Warren's model includes all 'community decision organizations' (CDO's) within a given community. This is a very diverse group including such organizations as "community welfare councils, urban renewal authorities, antipoverty organizations, housing authorities, chambers of commerce, federations of churches, municipal health and

welfare departments, boards of education, etc." (p. 413) These organizations have vastly different functions, goals, and vertical and horizontal interorganizational linkages.

On the other hand, Hage is dealing only with service delivery organization which are serving a specific common clientele, namely, the mentally retarded (MR). His interest is in developing a mechanism whereby this delivery system can become more effective by processing its clients simultaneously rather than serially. For Hage the major impediment to this integration is the recalcitrance of the individual organizations. He assumes that organizations have a high need to maintain their autonomy and that it is therefore unlikely that they will establish joint programs on their own initiative.

Warren, however, does not share Hage's assumptions regarding the reluctance of organizations to cooperate. He assumes that organizations do not consider their interaction in a zero-sum sense and that they are therefore inclined to coordinate their activities if they are given the opportunity. Following Durkheim's concept of an 'opaque environment', he proposes that a lack of coordination is primarily due to the absence of established channels of communication between organizations.

Given these dissimilar assumptions, objectives and contexts, it is not surprising that the authors propose different strategies for increasing cooperation between organizations. Warren emphasizes increasing the flow of interagency information to facilitate coordination, whereas Hage designs an elaborate structural mechanism to insure coordination.

More specifically, Warren recommends that to better enable each CDO to meet its goals, two approaches can be taken: 1. Increase the efficiency

of each organization, thereby giving them more resources to use in goal directed activities, or 2. Increase the levels of goal attainment for each organization simultaneously by establishing procedures for nine activities. These are: 1. Joint data banks 2. Prompt communication of change in policies 3. Increased feedback between programs 4. Increased feedback from the community 5. Improved distribution of resources 6. Overlapping boards and staff via interagency committees 7. Increased scope of interaction between organizations 8. Joint participation in areas of common interest 9. A central decision making body to resolve conflicts.

Hage's model is very different. He proposes that funding for providing assistance to the mentally retarded be awarded to coalitions of organizations with jointly coordinated programs and a central record keeping function, rather than to individual MR service organizations. This policy would establish what he calls 'supra-corporate' organizations to serve this client population. He further proposes establishing a 'supra-corporate board' to protect the public interest. It would be composed of 1/3 community elites, 1/3 professional staff and 1/3 representatives of the client population.

It is significant that half of Warren's recommendations involve increasing the flow of communication and that those involving structural linkages are very vague, ill-defined and receive very little emphasis in the rest of his paper. In contrast, Hage's model is entirely structural and thereby leads to a much higher degree of integration between the programs. Again, these differences can be traced back to the characteristics of the organizations being coordinated (all community decision organizations vs client specific organizations), the 'basic nature' of organizations

(cooperative vs competitive), and the reason for a lack of coordination (lack of information vs lack of resources).

This comparison highlights the fact that while both authors have designed an IOC program to overcome specific problems within a given set of contextual parameters, they have not systematically made these problems and contests explicit in their models. Consequently it is difficult to assess the appropriateness and feasibility of their proposals. Providing a framework for improving the comprehensiveness of future IOC model building efforts is the objective of the remainder of this paper.

I. PROBLEMS ASSOCIATED WITH IOC

A review of the literature dealing with interorganizational coordination yielded a list of four problems of coordination likely to be encountered in establishing and operating an IOC delivery system.

These are:

1. Coordination may reduce a system's potential for adaptation.
2. If coordination poses a threat to the autonomy of the organizations to be integrated, they will be reticent to cooperate.
3. A lack of domain consensus within the collectivity may preclude collaboration.
4. Horizontal coordination may conflict with vertical linkages, and vice versa.

1. Integration may reduce a system's potential for adaptation.

Generally little attention is given to the disadvantages of system integration in models for rationalizing delivery systems. However the writings of social evolutionary and systems theorists such as Sahlin's and Service (1960), Stebbins (1965), and Bateson (1972), suggest a strong

need to consider the possible negative consequences of integration. The principal problem is suggested by Weick's provocative question: "Is adaptability reduced by adaptation?" The reasoning is: The survival of a system is a function of the complementarity of its characteristics with the conditions of its environment; (Bateson, 1972; Campbell, 1965). Since environments change (Emery & Trist, 1965; Terryberry, 1968), to insure its viability a system must maintain a "pool of variability", i.e., a high diversification of internal characteristics and decision rules. Because integration and its attendant high formalization and standardization are not conducive to innovative and creative solutions to problems (V. Thompson, 1965; Greiner, 1967; Aiken & Hage, 1968), nor to effectively dealing with heterogeneous demands from the environment (Merton, 1940; Blau, 1955), nor to overall system efficiency (because competition is forbidden, of Hirschman and Lindblom's "Theory of Dysjointed Incrementalism", 1962), it may be highly dysfunctional for a system to finely adapt itself to its present ecological niche by forcing its subsystems to become highly specialized and tightly integrated. In less esoteric terms it may not be wise for the Department of Labor to concentrate too heavily on integrating its poverty programs because the poor may become rich, or more likely, the dominant interests in the country may dictate a change in priorities away from helping the poor and towards helping the handicapped or the Vietnam veterans. If this occurs, a highly integrated and specialized system may be so finely tuned to its current function that it will be incapable of meeting the changes in environmental conditions.

In general, the larger the scope of a system, the larger its task (Thompson, 1967), or relevant (Dill, 1958) environment. In order for programs operated by a federal agency to remain viable they must be

responsible to the national environment--meaning the vagaries of national sentiment regarding funding priorities, as well as the idiosyncratic demands and needs of the client populations and local program administrators across the nation. In comparison, programs at the state level need only adapt to their state environment, and local programs need only adapt to the changes in the community environment. This line of reasoning has been used by the advocates of special revenue sharing. Examined in this manner, their argument that decategorized program funding administered at the local level should enable programs to be more flexible and better able to adapt to changes in their environment becomes true by definition.

2. If coordination poses a threat to the autonomy of the organizations to be integrated they will be reticent to cooperate.

Gouldner (1959) and Sjoberg (1960) were two of the first sociologists to argue that integration within a system can be viewed by subsystems as highly problematic and threatening to their autonomy. It is clear that organizations attempt to control their input (Carlson, 1964) and output (Thompson, 1967) transactions with their environment so as to maintain their autonomy. In their case studies of attempts by health and welfare agencies to establish joint programs, Crow (1970) and Mansur, et al (1967), found that organizations would not enter into a cooperative venture until they were assured that their overall autonomy would not be threatened by the venture and that that autonomy which they must inevitably surrender would yield compensatory returns. In Hage's model the threat which IOC might pose to the collaborating organizations was treated as the principal obstacle to the integration of services. Collver's (1970) question summarizes this problem well: "How can autonomous groups pursuing their private interests appear to work for common goals?"

3. A lack of domain consensus within the system may preclude cooperation.

Here domain consensus is broadly defined to include not only Levine and White's (1961) two pre-requisites of agreement on the clients served, and the types of services offered by the respective organizations, but also agreement concerning the manner in which services should be offered. This has been referred to as ideological consensus by Benson et al (1973) and as paradigm agreement by Warren (1974). Collver's (1970) observation that competitors don't cooperate is trite but true. It is just as true that cooperation is impossible unless the parties agree on the purpose, scope and appropriateness of the cooperative activity. In Form and Nosow's (1958) study of the effects of disasters on communities they found that congruent expectations were a prerequisite for cooperation between organizations. Likewise, in their studies of attempts to coordinate activities between agencies dealing with juvenile delinquency, Miller (1958), Hollister (1970) and Nelson (1965) all cite the lack of agreement on the causes of, and appropriate treatment for, delinquency problems as the principal reasons for the failure of these efforts.

However this incongruence is not always apparent at the outset of IOC. It is therefore possible for the interaction required by coordination between organizations to create conflicts between them as it makes apparent their dissimilarities. This proposition has been discussed by others in different contexts. For instance, at the general theory level, Simmel (1950) has postulated that as the interaction between two elements increases the incidence of conflict between them will also increase. Within the realm of organizational theory, Selznick (1950) has criticized Weber's theory of bureaucracy because it assumed that organizational members would interact with one another based solely on the prescriptions of their positions.

Selznick's point was that people interact as whole, rather than as compartmentalized, individuals and this is why bureaucratic rationalism is only ideal and cannot account for the real phenomenon of conflict between informal work groups and formal organizational authority.

Just as it is unrealistic to expect members of organizations to interact only on the basis of their role requirements, it is unrealistic to assume that the representatives of organizations assigned to an interorganizational coordinating committee will interact solely on the basis of that role. Their behavior will be greatly influenced by the values of the organization they represent, their role within that organization, their professional training, etc. As these representatives meet together to plan their joint activities they may for the first time be confronted with the dissimilarities between their points of view regarding very fundamental and important concerns. The more intense this interaction becomes the more readily apparent the disparity between their perspectives will become and the more difficult it will be to reach a consensus. It is in this manner that the interaction process itself fosters conflict by generating an ethnocentric "we" versus "they" attitude.

4. Horizontal coordination may conflict with vertical linkages, and vice versa.

As was pointed out earlier, most public organizations are members of more than one system or network. If an IOC system is composed of organizations from the same population and if these organizations are not all members of the same vertical system, then we can expect that the coordination within the horizontal system may negatively affect the integration between each organization and its respective vertical system. Naturally the more incompatible the requirements for lateral IOC are with the responsibilities of

membership in its vertical system, the more conflict will be generated by an agency's participation in both systems. Support for these propositions comes from studies of the Forest Service and health agencies. In a section of his book appropriately entitled "Challenges to Unity", Kaufman (1960) describes the difficulty the Forest Service has in keeping local forest rangers integrated within the system because of their identification with the problems and perspectives of the communities in which they serve. The more closely the forest ranger is tied into the local community the less he can be counted on to represent the Forest Service if a conflict between the two arises. Similarly, in their studies of interorganizational relations Levine and White (1961) and Benson (1973) have shown how state rehabilitative agencies who must justify their existence to their legislature find it necessary to not accept as clients those people with disabilities which are not easily and quickly rectified because they would give the agency the appearance of being unsuccessful. This creates conflict between these agencies and other health programs which are dealing with seriously debilitated patients because they can't get the state to accept them for rehabilitation.

The significance of this problem is further highlighted by Mathiesen's (1971) study of communications between prison officials and their environment in Scandanavia. The conclusion of his study was a general principle: when B (prison officials in his study) are dependent upon A (environment, e.g., parole board) for information demanded by C (prisoners), then B develops an affective role with A as a means for securing that information. The result is that this relationship is viewed with suspicion by C and this leads to a reduction in communication between B and C. Applying Mathiesen's general principle to this situation it is probable that horizontal systemic relationships (analogous to A and B) will negatively affect vertical systemic relationships (B and C).

II. GENERAL SOLUTIONS FOR THE PROBLEMS OF COORDINATION

Given this somewhat formidable appearing list of problems to be encountered when coordination between organizations is attempted, what clues does the literature give us regarding the solutions to these problems, or the means whereby their negative effects can at least be mediated? The term is used purposefully because the solutions proposed in this section are not context specific. In other words, they are ideal solutions to ideal or theoretical problems without reference to the specific conditions under which the problems might occur. As contradictions between the general solutions to different problems emerge in this section, the importance of the role of contextual conditions as moderating variables will hopefully become apparent.

1. General solutions for the problem of coordination decreasing a system's ability to adapt.

To review briefly the problem of adaptation reducing adaptability, the more tightly integrated a system is and the more finely tuned it is to its present ecological niche the more difficult it is for that system to adapt to changes in environmental conditions. Actually this problem can be broken down into two sub-problems: 1. structural inflexibility and 2. small pool of variability.

A discussion of the dimensions of a system, of course, implies that a system exists. While the systemness which is present in a particular IOC delivery system is an empirical question, the point is that the more tightly integrated the collaborating organizations are, the more inflexible the IOC system will become. This is true not only of the linkages within the system but also of the linkages between the system itself and other systems, e.g., other delivery systems, funding sources, local government, etc. The obvious solution to this problem is for the system to remain as flexible as possible.

Whereas this is generally the condition of the relations between organizations within most delivery systems (not because of a rational decision to remain flexible to enhance their adaptability, but because of the tenuous nature of the arrangements upon which the system was built) there seems to be a seductive tendency for policy makers to equate effectiveness with permanence. The result is that purposefully designed delivery systems are likely to be tied solidly into an external structure, e.g., local governmental agencies, in an effort to secure needed resources and legitimacy, and tightly linked internally to enhance efficiency. Of course, both of these objectives are important for an effective operation.² My purpose is simply to draw attention to the possible unintended consequences of this policy. An example might help substantiate the validity of my argument. The area of manpower services is currently undergoing some rather drastic changes due to the recent shift towards revenue sharing. Under this new philosophy manpower programs will be funded by local governments rather than by the Department of Labor. Based on a preliminary analysis of data collected in 1973 from 124 such agencies, those programs which were previously tightly linked to their categorical program hierarchy are having the most difficulty receiving funding under Manpower Revenue Sharing. On the other hand, those organizations which were members of less centralized systems which allowed them latitude to innovate in response to local conditions had established linkages with local governmental agencies in the course of their work and were therefore in the most advantageous position to receive decentralized funding.

The second aspect of the problem is a low pool of variability. To overcome this the delivery system should include as heterogeneous a mixture of organizations as possible, in terms of the functions, professions and perspectives of the organizations involved. In conditions of environmental

turbulence, internal diversity is a critical resource. It enables the system to interpret the changes in environmental inputs and to generate the appropriate responses. "It takes equivocality to remove equivocality, or as Ashby's Law of Requisite Variety states, it takes variety to destroy variety." (Weick, 1969:40)

A large pool of variability will not only enhance the system's ability to cope with changing environmental conditions, it will also increase the effectiveness of the system's operation by tapping new and innovative ideas, techniques and technologies from diverse sectors of the environment (Hage and Aiken, 1967). Hage and Dewar (1973) found that one of the best predictors of organizational innovation was organizational complexity, i.e., the number of different occupational specialties in an organization. They reasoned that complexity measures the permeability of an organization to new information being generated by other organizations such as professional associations. Of course the presence of different perspectives is useful to a system only if it tolerates the expression of these divergent points of view. This was also borne out by Hage and Dewar's research. They report that the single most important indicator of innovation is the attitudes of organizational elites towards innovation.

2. General solutions for the problem of resistance to coordination caused by perceived threat to organizational autonomy.

To decrease an organization's resistance to participating in a collaborative effort, the threat of the joint venture to the organization's autonomy must be decreased. This can be done variously.

1. Convince the organization that coordinating its activities with those of another organization will be beneficial. In Mansur's, et al, (1967) study of Project ENABLE, the agencies involved agreed to collaborate once

they were shown how the project would assist them in meeting their individual goals. A similar method for convincing local units of corporate systems that participation, and its consequent loss of autonomy, is acceptable, is for the parent systems to reward those members who participate in the activity. A frequent explanation for why change is often short lived is the lack of supportive structure. If the Department of Labor and the Department of Health, Education and Welfare want their agencies in Middletown to coordinate their activities more, then rewards within the respective systems should be contingent upon local coordination.

2. The collaborative activity should not require the participating agencies to commit a substantial portion of their resources. If only part of their programs or resources are involved, IOC will be less threatening to the organization's identity. Hage's solution to this problem is to use only new funding for operating the delivery system. Under this arrangement collaborating organizations would not be required to contribute any of their current capital resources. The utility of this proposal was borne out in Hollister's study of the coordination efforts between police youth bureaus and a juvenile court. He found that ample funding independent of the joint activity facilitated domain consensus which in turn increased coordination between the agencies.

3. Involve organizations whose internal programs and activities are loosely interconnected. Granovetter (1973) and Glassman (1973) have shown that systems whose sub-systems are loosely joined are most stable.³ Within the context of this discussion this means that loosely joined organizations are capable of involving one of their programs in a joint venture without disturbing the activities of the remainder of its programs. In this regard, Mott (1968) found that some organizations can coordinate a single complementary

function and still compete with one another in other activities. This is more likely if the organizations involved have internally loosely joined structures.

4. Vary the number of the organizations involved to reduce the threat to any single organization. There is some difference of opinion concerning the effect of the size of an organizational network on the autonomy of the focal organization. In the original discussion of organization-sets, Evan (1966) hypothesized that a large organization-set would result in low autonomy for the focal organization. More recently Starbuck (1973:17-18) has argued in favor of the opposite relationship. The resolution of these contradictory predictions will have to await an empirical test. However, the truth may lie somewhere in the middle since Kahn, et al, (1964) found an $\cap$ relationship between conflict experienced by boundary role occupants and number of different contacts.

3. General solutions for the problem of cooperation being precluded by lack of domain consensus.

The basic solution is to reduce the variability in the perspectives and values of the cooperating organizations. One way to accomplish this is for the organizations to share joint members. In Harrison's (1971) study of the relationships between a splinter pentecostal group and the Catholic Church he found that the remarkably low level of conflict between these groups was greatly facilitated by their overlapping membership. Given the sect membership's desire to remain faithful to the church, the latter co-opted the splinter group by having nuns and priests serve in leadership roles within the group. Similarly, Pfeffer (1973) and Dooley (1969) have demonstrated that overlapping board of director memberships greatly facilitates coordination between organizations.

A corollary approach is to homogenize the perspectives, values, goals, etc., of the cooperating organizations before they interact by subjecting them to the same socialization process. In his study of the procurement practices of the Department of Defense Grossbard (1970) found that because of the similarity of their perspectives, military procurement agencies and industrial contractors were operating in many respects as if they were a single organization. Because their members shared common professional backgrounds, training and interests, and related so well to each other it was sometimes difficult to draw organizational distinctions.

If the organizations being coordinated are members of corporate systems or strong federal systems, any effort to make their perspectives compatible must be initiated at the top by making the administrative policies governing the respective systems compatible. Too often federal administrators expect interaction between the local agencies of their systems which is not un-animously supported by the federal heads. One of the goals of the Emergency Employment Act was that the local EEA program, would convince the local civil service to make their job requirements more realistic and therefore less discriminating against the disadvantaged. However, in the absence of any effort to initiate reform at the national level the local EEA administrators were powerless to modify an institution as strong as the Civil Service. (Whetten, 1973)

Another possible solution to this problem is to structure the interaction process so that it will itself lead to positive sentiment between the parties. Sherif's, et al, (1961) Robber's Cave experiment showed that if interaction between dissimilar groups is based on their common need to reach an objective which can only be obtained through cooperation, then their interaction will lead to an increased acceptance of the opposing groups views.

Pfeffer (1972) reports a somewhat analogous finding. He found that managers' values in 'Company B' were very similar to the values of 'Company A', when 'Company B' was dependent upon 'Company A'.

Placing these findings within the context of interorganizational coordination, we can expect that if the fate of the organizations involved in a joint effort depends upon the success of that effort, a high rate of interorganizational interaction will lead to consensus. One way this dependence can be insured is to require that a substantial portion of the organizations' resources be committed to the joint activity.

4. General solutions for the problem of the conflict between horizontal coordination and vertical linkages.

For public agencies vertical linkages are the most important because they provide them with their most critically needed resources: money and legitimacy. Consequently, as a general rule when there is a conflict between a focal organization's horizontal and vertical linkages it must follow the dictates of the latter. With this kind of leverage a funding source which wants to increase vertical integration can make this a condition of funding local agencies. If, on the other hand, lateral coordination is more important than vertical linkages for the functioning of the local agencies (as in the case of most social service programs) then the parent system should make funding contingent upon local coordination.

Another method for facilitating horizontal coordination has been used by Urban Information Systems (Quinn, 1973). They developed a uniform computerized accounting system which was adopted by four federal agencies on a pilot study basis. These federal agencies are firmly committed to local coordination and this uniform reporting system greatly increased their ability to monitor the activities of local agencies and to assess their

coordination efforts. By making the IOC activities between the local agencies more visible to the respective federal offices, interagency coordination has increased significantly.

III. AN EXAMINATION OF THE PARAMETERS OR CONTEXTS WITHIN WHICH IOC OCCURS.

As noted earlier there are numerous contradictions between the general solutions proposed in Section II. For instance, one of the solutions to the problem of 'lack of domain consensus precluding integration' is to reduce the variability in the perspectives and values of the participating organizations. This strategy, however, accentuates the negative unintended effect of integration on a system's ability to adapt. Joint activities between organizations with similar functions, values, and staff severely restricts the emergent system's pool of variability. In another case, if in order to reduce the potential for conflict within a delivery system, the interacting organizations are required to commit the bulk of their resources to the joint venture, the likelihood of their participation is decreased because of the threat this requirement poses to their need for autonomy. What we hope to demonstrate in this section is that these contradictions reinforce the conclusion drawn from the comparison between the IOC models proposed by Hage and Warren, namely that the appropriateness of a design to resolve coordination problems is a function of the contexts in which they occur. What is required now then is a delineation of the important parameters surrounding the creation and operation of IOC delivery systems. These will be organized under the following headings:

1. The availability of resources
2. The type of organizations involved
3. The type of coordination involved
4. The level at which the initiative for coordination originates

1. Availability of resources in the environment

Following an open systems perspective, an organization's need to control resources required to perform its technology and achieve its goals has received considerable attention in the literature. Yuchtman and Seashore (1967) base their theory of organizational effectiveness on an organization's ability to reduce its dependence on its environment by controlling critical resources. Aiken and Hage (1968) have argued that the principal motivation for organizations to initiate joint programs is their common need to expand their resource base. Most recently Benson has reaffirmed the central importance of resource control in organizational management: ". . . it is assumed that organization decision makers are typically oriented to the acquisition and defense of an adequate supply of resources. Such an orientation becomes, for the decision makers, an operational definition of the purposes of the organization and thus of their responsibilities as decision makers." (1974, p. 4)

Several factors have been suggested as influencing the ability of an organization to secure resources, e.g., the abundance of a given resource in the environment (Aldrich, 1972; Benson, 1972); an organization's linkages with resource bases outside the immediate environment (Levine and White, 1961; Benson, 1974; Warren, 1974); its awareness of alternative sources of resources (Van de Ven, 1974) as well as the intraorganizational structure of the organization (Whetten, 1974). Because of the need for parsimony in this paper these dimensions will be aggregated into the single dimension of: scarcity/abundance of needed resources. This is defined as the relative ease with which an organization can secure resources required to perform its tasks.

Clearly the resource needs of individual organizations vary, however in general most service delivery organizations are dependent upon an abundance

of funding, staff, clients, task related linkages with other organizations, and authority (Aldrich, 1972; Benson, 1974).⁴ Because the last two resources have not been as widely discussed in the literature they deserve further elaboration.

Many organizations perform a mediating, (Thompson, 1967) or brokerage, function between their clients and the services provided by other organizations. A good example is the 'people processing organizations' (Hasenfeld, 1972), such as the employment service. The employment service provides little in the way of direct services to their clients, other than some vocational counseling. Consequently their effectiveness as a service delivery organization is contingent upon their awareness of job and training opportunities in other organizations in the community. Viewed in this light the large sums of money which they have invested in developing referral systems and job banks can be seen as an effort on their part to control this critical resource.

As an organizational resource, "authority refers to the legitimation of activities, the right and responsibility to carry out programs of a certain kind, dealing with a broad problem area of focus." (Benson, 1974, p. 4) This is an extremely important resource for service delivery organizations inasmuch as the probability of securing other resources is to a large extent dependent upon the legitimacy afforded the focal organization. Various strategies have been used by these organizations to enhance their legitimacy, e.g., tying their operations into a larger, well established parent body (Aiken and Alford, 1970; Turk, 1973) and co-opting prominent community leaders by placing them on the organization's board of directors (Pfeffer, 1972, 1973; Zald, 1969). In a broad treatment of this topic, Warren (1974) has argued that populations or organizations act to reinforce each other's

legitimacy by institutionalizing a mutually beneficial delineation of domains. This consensus is jointly protected and perpetuated through nominal rather than radical conflict and innovation and by an implicitly agreed upon definition of acceptable solutions to the inadequacies of service delivery which favors modification of existing programs and policies and hinders the entry of competing agencies into the field.

If we relate this contextual variable to the four IOC potential problems it appears that both extremes increase the likelihood that IOC programs will activate some of these problems. An organization operating in a scarce environment is necessarily facing considerable uncertainty because of its vulnerability. Under these circumstances organizations will be extremely cautious about entering into any new ventures which will require a drain on their scanty resource supply. The rate of return which they would require on an investment in collaboration would be greater than for organizations with more resources, due to the fact that their 'stake' represents a larger proportion of their total resource base. Another consequence of a high state of uncertainty regarding resource acquisition is that it causes organizations to be more protective of their domains. This jealousy over domain claims decreases the likelihood that organizations will be able to agree on the purposes, content and structure of an IOC program.

Turning from a condition of scarcity to one of abundance we find that opulence also has its draw backs. Most significant is its affect on adaptability. The richer an organization's environment the less incentive the organization has to monitor changes in environmental conditions and to maintain a high pool of variability and a flexible structure to facilitate adaptation to possible changes in these conditions. While it would require a more drastic shift in the environment to negatively affect a rich organization,

it is in a sense more vulnerable to such a change because a history of security tends to foster an organizational myth⁵ that might cause it to discount early trends which would otherwise serve as early warning signals. Also, in conditions of abundance there is more likely to be conflicts between vertical and horizontal linkages. Only the rich organization can afford to not strictly heed the wishes of the hierarchical levels above it. A case in point are research labs which were at one time formally under the auspices of a corporation or university but which have developed such a large independent resource base, including a national reputation, that they have gained a great deal of autonomy from the dictates of their parent organization and in some cases have even severed these ties completely. This option does not exist for the poor organization because it is heavily dependent upon its vertical linkage for supplying its resource needs and it must consequently acquiesce to their wishes in cases involving a conflict of interests.

2. Type of organizations involved in IOC: Compatibility

Here the bases for comparison are the degree to which the organizations have shared goals, similar elite values, complementary technologies and resource needs. Reid (1967) proposed that the pursuit of similar goals fosters exchanges and a division of labor and responsibilities between organizations. However, the discrepancy between official and operational goals is a common deterrent to these coordination activities. Organizations with similar official goals frequently have dissimilar operational goals. This is due to the organizations utilizing different technologies and having members with different values and beliefs. As Warren (1974), Yuchtman and Seashore (1967), Perrow (1970) and Etzioni (1961) have pointed out, organizations tend to pursue objectives which are compatible with means which they have access to

and the values of their elite. Using a frequently cited example, despite the fact that both a police department and a family welfare agency profess a common goal of reducing juvenile delinquency their use of differing technologies (incarceration vs counseling), based on different values systems (punishment vs rehabilitation), interfere with inter-agency cooperation.

The complementarity of resource needs is another important variable for assessing the compatibility of organizations. Hawley's (1951) discussion of symbiosis and commensalism highlights this point. A symbiotic relationship is perfectly compatible for both parties because they are mutually dependent upon each other. Consequently, symbiotic relationships are ideal for inclusion in IOC delivery systems since the organizations have a stake in assisting each other. The more common and less ideal relationship is commensalism. Literally the word means "eating from the same table". At the organizational level this implies that two organizations have the same resource needs. Whether or not sharing the same resource base with another organization will lead to competition is dependent upon the abundance of the particular resource in question, and the number of others with the same needs. Presumably the energy crisis has precipitated numerous conflicts over the distribution of oil products between previously congenial members of the same industry. In this regard Levine and White (1961) demonstrated that those service agencies which were members of a state or national corporate structure (e.g., the American Cancer Society) had less of a need to compete with the other agencies for resources in the local environment. In this manner what we have referred to as vertical systemic linkages play an important role in inter-organizational coordination since they permit cooperation between local agencies which have similar resource needs. In summary, recalling Collver's statement that "competitors won't cooperate," competition or compatibility

cannot be predicted simply by comparing the technological needs of organizations. An additional critical factor is the abundance of the necessary resources in the environment.

Attempting to initiate IOC between non-congruent organizations is clearly problematic. Because of differing value systems and *modus operandi* it is likely that coordination of activities would prove to be highly threatening, that the organizations could not obtain domain consensus, and that the requirements for coordination between non-congruent organizations would be incompatible with the respective organizations' linkages with their vertical systems. Therefore, congruence is clearly an important prerequisite for successful interorganizational coordination. Its only dysfunction is that an IOC system composed of homogeneous or at least compatible organizations has by definition a smaller pool of variety to use as potential for adaptation and less internal conflict which serves as a strong impetus for innovation and change (Coser, 1954).

3. Type of coordination

This section deals with the characteristics of the interaction mechanisms and processes. Clearly there are numerous possible ways for organizations to interact.⁶ These vary from Warren's proposal for an informal and general exchange of information between community organizations to the highly structured co-sponsorship of joint programs proposed by Hage. For the purposes of this paper the most important dimensions of IOC are the degree of structure⁷ and intensity.

The structure of an interaction refers to the extent to which transactions are formally acknowledged by the participating parties and the extent to which the procedures governing their transactions and the elements exchanged are clearly specified and remain fixed across repeated transactions. The more highly structured the linkage between organizations is

the fewer coordination problems will arise to mar the interaction process. In Reid's (1967) study of a coordination attempt between a school and a family services agency, he reports that the relationship broke down largely because the school never formalized its role. The agency staff reported that when they would call the school about a matter they would be referred from one office to another and they seldom spoke to the same person. On the other hand Black and Kase (1963) report that the principal reason for the success of a joint activity between a welfare department and a rehabilitation agency was that each agency clearly specified their contact people for the inter-agency exchange and agreed to specific procedures governing their interaction. Some of the factors which determine the structureness of IOC are: 1. Whether the interaction is mediated by a third party, e.g., a local coordinating council, a vertical hierarchy or mandated by law. 2. The extent to which procedures are codified. Personal agreements between representatives of two organizations may greatly facilitate the flow of elements between their respective organizations, but unless these procedures are specified and formally included in the job description of the boundary personnel involved in the transactions, personnel turnover will destroy the linkage.

The second important characteristic of the coordination process is intensity, which is a measure of involvement. Marrett (1971) made a distinction between two types of intensity, namely the amount of resources invested by each organization and the frequency of interaction between the organizations. As Hage, Reid and Marrett have both pointed out, the intensity of a relationship strongly influences the participating agencies' attitudes regarding coordination activities. Agencies are more cautious about engaging in exchanges which will involve a large amount of their resources. They naturally are willing to accept less of a risk that the collaborative venture will fail

and they are more inclined to make their cooperation contingent upon a reciprocal exchange of resources with other participants. However, if agencies do agree to engage in an intensive network of transactions they will be highly committed to continue the relationship because of the sunk costs which they have invested. Further, given an alternative between obtaining comparable resources (e.g., clients or services) from an organization outside the network and from one inside, they are more likely to choose the network member in order to balance their receipts from, with their expenditures to, the system. In summary, there is a definite trade-off in the effect of designing a highly structured and intense IOC system. While on the one hand it facilitates the orderly flow of clients and services between organizations and increases the likelihood that the participants will utilize the opportunities available to them in the system once it has been established, it concomitantly activates each of the four potential IOC problems. By tightly interconnecting the elements in a highly intense IOC system the potential for adaptation of the system is greatly reduced. Further, it increases both the likelihood that participating organizations with both vertical and horizontal systemic linkages will obtain conflict between those ties and the possibility that the agencies will be unable to achieve domain consensus since given the size of the investment required each will endeavor to impose their technical rationality on the others (Thompson, 1967; Warren, 1974; Marrett, 1971). The conclusion seems to be that designing a highly structured and intense IOC system will facilitate interactions between participants once the system has been established, however, this type of system will be difficult to organize initially if it involves autonomous organizations.

4. The point at which the initiative for coordination originates.

Here these are basically two possibilities. IOC can be spontaneously initiated by the participating organizations themselves (population level

definition in Figure 1), or by some higher hierarchical level of authority in the vertical system(s) (vertical system definition in Figure 1) to which the participants belong. The first case has been referred to by Hage (1974) as auto-correlation by Reid (1967) as unmediated coordination and by Lindblom (1965) as coordination by mutual adjustment.⁸ In this situation, collaboration is usually initiated in response to a common felt need. This consensus regarding the need for coordination serves to justify the utility and legitimacy of the participating organizations' investment required to support and sustain the exchange mechanisms. The result is that it is less likely that the demands which coordination inevitably place on participating organizations will be treated as threats to their autonomy.

This mode of coordination does tend to foster other of the IOC problems, however. For instance, it is particularly vulnerable to disagreement between participants over domain consensus. Because there is no mediating body to assist in working out differences in philosophies and procedures for operating programs and reaching objectives, disagreements over these key points is likely to preclude collaboration except in cases in which the future viability of the agencies involved is contingent upon the success of their coordination efforts. The likelihood of this problem interfering with IOC is reduced when the participating organizations are all members of a common coordination council such as a local welfare or community services council. In this case the presence of such a council indicates a collective awareness of the goals and activities of each of the members and the perpetuation of the council can be taken as evidence that the participants accept each others respective domain claims as being legitimate and compatible with their own.⁹

The problems caused by lack of domain consensus are minimized when IOC is initiated by the head(s) of the vertical system(s) of the participating agencies. Since vertical ties have been represented in this paper by the

administrative hierarchy of a state or national programs, e.g., Neighborhood Youth Corp., Department of Vocational Rehabilitation, by definition the domains of the organizations at the bottom of these hierarchies, which serve as the operation or production arm of the program, are strictly and publicly defined. Consequently coordination between organizations within the same vertical system or between organizations in different systems (more likely) will be facilitated by a clear understanding of the orientations and operations of the participants. Further, any potential conflicts are generally apparent from the outset to someone who is familiar with the guidelines of the respective programs and consequently it is possible for these to be worked out in designing the coordination activities. This does not mean, however, that the proposed exchanges with other programs will not be threatening to the local agencies. While there may be unanimous agreement regarding the legitimacy of the role to be played by each of the participants there is still the possibility that the union of those roles might be perceived as a threat to some of the members.

Another factor is that because of their hierarchical control, an IOC program initiated by the heads of vertical systems is likely to be more formally structured than spontaneous coordination activities between local agencies. This means that it will require less effort and resources to maintain the coordination structures. However, it also decreases the likelihood that the emergent system will adapt to changes in its environment. This is true not only because the formality of the program decreases its flexibility but also because the relevant environment of the participating organizations is larger and more complex (state or national vs community constituency). Consequently it is more susceptible to change, more expensive to monitor and therefore more difficult to adapt to.

To summarize, in this section we have discussed the important contextual dimensions which together form the nexus in which IOC is organized and

carried out. In addition, the relationships between these contextual variables and the problems likely to be encountered by IOC programs have been discussed. These relationships are depicted in Figure 2.

Insert Figure 2 here

The utility of this matrix for administrators and designers of IOC systems is that it indicates for them the likelihood that the various potential problems will be active problems within the specific contexts in which they are operating. This is not always obvious. What are apparent are the malfunctions of the system such as conflict over procedures or lack of utilization of the IOC network, but these are often only the symptoms of more basic underlying problems. Figure 2 shows us where to start looking to uncover the real problems.

V. GENERAL CONTINGENCY APPROACH TO IOC

In the introduction we indicated that the purpose of this paper would be to provide a guide for minimizing the problems which have beset IOC programs heretofore. Thus far we have indicated which of these problems will have to be overcome in designing IOC delivery systems for each of four contextual dimensions. However, this information is not sufficient for planning purposes for it does not identify the problems, and their solutions, for combinations of the contextual dimensions and it does not provide a guide for choosing between contradictory solutions to two or more problems which are present within the same context or combination of contexts.

The ideal means for presenting the relationships between all of the combinations of the values for each of the four contextual dimensions and the four IOC problems would be to place them in a 16x4 matrix. However, since a discussion of that many cells would be impossible, an alternative is to discuss only the combinations of contextual conditions (from this hypothetical

matrix) which are most likely to activate each of the four problems. These are shown in Figure 3.

Insert Figure 3 here

This matrix more nearly represents the complexities faced by designers and administrators of IOC programs. Rarely do they have the luxury of only having to consider a single constraint. However, there are patterns in this matrix which help simplify the complexity. For instance, with the exception of the relationship between Type of Organizations and problem #3, the relationships between the first two contexts Availability of Resources and Type of Organizations, and all of the problems are the same. Further, the combination of the values of these two contexts which activates problems #1 and #2 is the opposite of the combination which causes problems #3 and #4. This means that while these two contextual dimensions have basically the same relationships with the four problems, the values of each which resolve the first two problems exacerbate the second two. The dilemma which this poses suggests the need to order the four problems based on the severity of their consequences for such a ranking could serve as a guide for making choices between these trade-offs. The ordering depicted in Figure 3 represents what we consider to be the immediate threat to the viability of an IOC program presented by each of the potential problems. Consequently, in cases where all of the problems cannot be solved simultaneously planners should be most concerned about coping with problem #1, then problem #2, and so on. Based on this guide, systems designed to include compatible organizations which have an abundance of resources available to them are most likely to succeed.

The design implication of the discussion up to this point is that a given problem can be minimized by establishing a certain combination of the eight values of the contextual dimensions. However, in most situations it is

not realistic to expect that a planner could manipulate all of these variables so as to obtain this optimal mix. Because it is more likely that he could secure control over only one or two of the dimensions, it is important for him to know the relative likelihood that each dimension would activate each of the problems--or conversely, the potential of each of the contexts for 'deactivating' each of the problems. In Figure 4 the relative impact of the dimensions on each of the four problems is identified. The rank of '1' indicates that that context is most likely to activate the problem area. In addition to identifying the relative impact which each dimension has on each of the problems, the overall relative effect of each of the dimensions on all of the problems is reflected by the row totals.

Insert Figure 4 here

In addition to showing persons responsible for inter-agency coordination how important it is for them to obtain control over each of the contextual dimensions, Figure 4 also suggests that there are different approaches for resolving each of the problems depending on which context it is in. The first approach is to use the general solutions outlined earlier in the paper. However, since in most cases these involve altering an important contextual condition which in a given situation may not be controllable, an alternative strategy is to manipulate the other important contextual variables so as to mitigate the effect of the uncontrolled parameter. An example might help make this clearer. Suppose a planner ascertains that disagreement between two organizations regarding the appropriate methods for ameliorating the social handicaps of a client population which they are cooperatively attempting to service has caused a deterioration of their relationship to the detriment of their clients. The general solutions for resolving a lack of domain consensus are to include organizations which have, among other things,

common professional orientations. However, if the resolution of the clients' problems requires the combined application of the different technologies utilized by these organizations and it is precisely the differences in the technologies which has precipitated the ideological disagreement, then the general solution is not a viable alternative. In such a case it might be possible to manipulate the other variables in the context to mitigate the effect of being locked into using incompatible organizations. The next most important contextual variable is the Level of Initiation. If both of the organizations are members of vertical systems it might be possible to convince superiors in these hierarchies that the cooperative activity is increasing the services performed by their 'program' and thereby receive their sanction and support for the IOC activity. If this effort fails or is not an option, it might be possible to alter the Type of Coordination structure by obtaining an agreement from both organizations to service a reduced number of clients or to service a restricted range of their needs. Another possibility would be to establish an independent body which would screen the clients and ascertain how much of the services provided by each organization is appropriate on a case by case basis. By buffering the contact between the organizations it might be possible to reduce their antagonisms toward one another.

This discussion suggests the following guideline: When control over the contextual factors which would resolve a problem is not possible (as prescribed by the general solutions), reduce the impact of the problem by manipulating other contextual dimensions which are related to the problem using Figure 4 as a guide.

Considered together Figure 3 and 4 provide some assistance for resolving the dilemmas created by contradictory general solutions to multiple problems in a given context. One of the solutions for solving the problem of Domain

Consensus was to create a dependency relationship between the collaborating organizations such that their common fate would be based on the success of the IOC program. An alternative strategy would be to minimize the intensity of the interaction between the parties in order to reduce the likelihood that the differences between them would become salient. Similar recommendations of low scale involvement were made for solving the problem of Threat to Autonomy in order to reduce the threat of collaboration to the participating organizations. Figure 3 provides a point of reconciliation for these contradictory prescriptions. The only difference between the combinations of contexts which is most likely to precipitate these two problems is the value of Level of Initiation . This suggests that if there is the potential for a lack of cooperation between participating agencies and the parent system(s) initiates the IOC program, then in order to insure compliance they should stipulate that important resources which they control can be secured only on the condition of cooperation. If on the other hand the coordination project is initiated at the local level and there is no compulsion involved then the principal concern should be to reduce the threat of coordination to the agencies involved.

A similar contradiction exists between the recommendation to alleviate the problem of a lack of domain consensus by including highly congruent organizations and the need to include non-congruent organizations in order to increase the adaptive potential of the system. In this case Figure 3 does not provide us with a moderating variable to use as a point for clarification. In fact it shows that the relationships between the two problems and three of the four contextual dimensions is opposite. At this point one might ask, "Is there a difference in the relative impact which the context Type of Organization has on the two problems?" If there is a clearcut difference

then this could serve as the criterion for resolving the dilemma. Unfortunately, Figure 4 shows that this contextual variable has a critical effect on both problems. It does indicate, however, that domain consensus is a more critical problem than Reduction in Ability to Adapt and consequently its resolution is more important.

From these examples we can derive a second guideline: When a manipulation of the values of a contextual dimension which would solve one IOC problem is likely to activate a second problem, attempt to resolve the dilemma by first manipulating other contextual variables. If this is not feasible then choose between the alternatives on the basis of the relative impact of the opposing problems on the future viability of the IOC system.

VI. CONCLUSION

The purpose of this paper has been to review and synthesize the literature on IOC for the benefit of those who are either planning, administering, or studying interorganizational coordination. The objective was not to provide an IOC model which could be used in all situations to solve every problem but rather to demonstrate the utility of using a contingency approach for effectively solving particular problems in specific contexts.

Obviously "the proof of the pudding is in the eating" and the utility of this paper depends on its ability to demonstrate to both practitioners and researchers that it is:

1. Necessary to explicitly analyze both the problems to be resolved and the contextual dimensions involved as they endeavor to facilitate and/or study interactions between organizations.
2. Possible to resolve the dilemmas and contradictions created by the complex nature of the problems and circumstances involved in IOC by following the guidelines suggested herein.

We set out to expand the "bounds of rationality" (March and Simon, 1958) of those associated with IOC programs and this has hopefully been done by suggesting new information to be considered and providing a framework for increasing the comprehensibility and utility of that which is already available.

Figure 1: Two Definitions of Interorganizational Systems

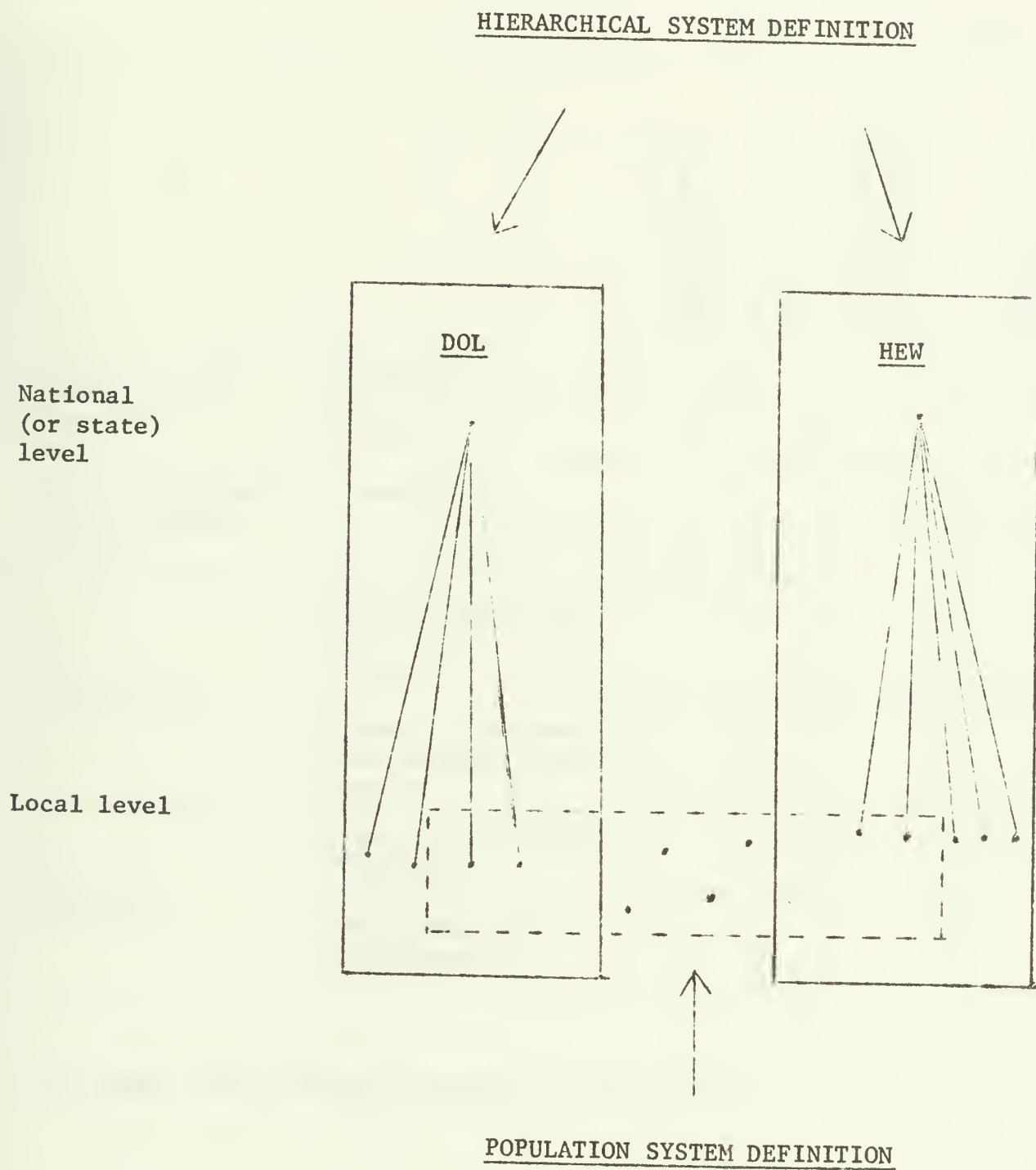


Figure 2: Matrix Showing the Relationship Between the Contextual Dimensions and the Potential IOC Problems.

		Potential IOC Problems			
		Lack of Domain Consensus	Threat to Autonomy	Conflict Between Vertical and Horizontal Linkages	Reduction in Adaption Potential
Availability of Resources	Abundant			+	+
	Scarce	¹	+		
Type of Organizations Included in IOC	Compatible				+
	Non-compatible	+	+	+	
Type of Coordination	Highly Structured and Intense Interaction	+	+	+	+
	Loosely Structured and Minimal Interaction				
Locus of Initiative	Hierarchical Level (Imposed)		+		+
	Population Level (Spontaneous)	+		+	

¹Indicates that problem is active in this context.

Figure 3: Relationships between Combination of Contexts and the Potential IOC Problems

Combination of Contextual Conditions Most Likely to Activate Each Potential Problem				Potential IOC Problems
Availability of Resources	Type of Organization	Type of Coordination	Locus of Initiative	
Scarce	Non-Compatible	Highly Structured and Intense	Population	1. Lack of Domain Consensus
Scarce	Non-Compatible	Highly Structured and Intense	Population	2. Threat to Autonomy
Abundance	Non-Compatible	Highly Structured and Intense	Population	3. Conflict Between Vertical and Horizontal Linkages
Abundance	Compatible	Highly Structured and Intense	Population	4. Reduction in Adaptive Potential

Figure 4: Relative Relationship Between Each Context and the Potential IOC Problems

Contextual Dimensions ¹	Potential IOC Problems ²				Total Impact ³
	1. Domain Consensus	2. Threat to Autonomy	3. Conflict Between Vertical and Horizontal Linkages	4. Reduction in Adaptive Potential	
1. Type of Organizations Included in IOC	1	3	1	2	7
2. Type of Coordination	3	2	2	1	8
3. Locus of Coordination	2	4	3	3	12
4. Availability of Resource	4	1	4	4	13

1. Ranked according to relative impact on all four IOC problems.
2. Ranked according to immediate threat to viability of IOC problems.
3. Because only 1 point separates them, caution should be used in ranking 1 higher than 2 and 3 higher than 4. However, there is clearly a major difference between 1 and 2, and 3 and 4.

FOOTNOTES

1. Since the first draft of this paper Warren has proposed some new approaches and perspectives for IOC and because these might appear to some to call into question the appropriateness of the objectives of this paper, they require a comment. In his recent book, Warren (1974) has argued that interorganizational coordination can have dysfunctional consequences. The most important of which is that it legitimates the assumption that additional coordination between existing programs is the most appropriate approach to solving unmet needs of clients and it therefore directs attention away from the possibility that these needs could best be met by instituting new programs utilizing different philosophies and technologies. One such novel approach has been proposed by Warren. He argues that the public sector should be shifted from operating on the premise of eliminating duplication of services wherever possible to encouraging competitiveness wherever feasible. By providing the disadvantaged with a social credit card for purchasing their services the viability of social services programs would become contingent on their ability to satisfy the needs of their clients instead of on their ability to document the existence of these needs to funding agencies.

While Warren's astute observations regarding the unintended consequences of coordination and his counter proposal for a radically different approach to providing social services are both provocative and instructive they do not negate the important role played by interorganizational coordination in the delivery of services to the needy. Proving that a goal is ineffectual should not suggest that the means used to reach it are not useful for pursuing more appropriate goals. Indeed if

public organizations were required to operate within the context of some type of a modified free market the need for agencies to collaborate would likely increase. IOC would be fostered by the fact that as agencies began to sell their services to potential clients (instead of funding agencies) many of them would become acutely aware of the inadequacies of their programs, facilities and staff. The fear of losing clients to new competitors would serve as a centripetal force drawing organizations with complementary needs and assets together into consortia. The case of small colleges pooling their resources in order to buy expensive equipment and sponsor costly programs needed to compete with larger universities, cited by Clark (1964), supports this proposition. While it is obviously true that systems of organizations, like single organizations, serve as tools for obtaining the means desired by their leaders (Perrow, 1972), the object of this paper is not to argue for or against propositions regarding how they should be used. Instead our purpose is to point out to the designers of IOC delivery systems the potential problems their programs may encounter within different contextual circumstances and suggest some strategies for overcoming these problems.

2. Aiken and Alford's (1970) study of Urban Renewal agencies has shown that interorganizational linkages are a particularly important factor in determining the success of new programs. "Newly established organizations may be severely limited because they are less likely to be in an organizational network that can aid in achieving an adequate level of coordination." (p. 662)
3. Ashby's (1952) definition of an ultra-stable system and Simon's (1962) analogy of organizations being structured like watches make the same point.

4. Benson argues that all resource needs boil down to money and authority, inasmuch as money buys staff expertise, hardware, office space, training slots in other organizations (and one might argue legitimacy). While this extreme simplification may be justified, an expanded list of resources is used here for the purpose of illustration.
5. Mitroff and Killman (1974) have recently discussed the impact which organizational myths can have on the behavior of members.
6. See Klonglan et al (1972) and Finley (1970) on scaling the various types of relationships between organizations and Marrett (1971), Aldrich (1972), Van de Ven (1974) and Benson (1974) for a specification of the dimensions of interorganizational relations.
7. Again the need for parsimony, which will become evident in the next section, forces us to combine the dimensions of formalization and standardization (Marrett, 1971) into what we are calling "the degree of structure".
8. Klonglan et al (1971) present an excellent discussion of the differences between these forms of coordination and their relative advantages and disadvantages. See also Mott (1968).
9. It should be noted that this logic holds only for those cases in which a council is established by the participating agencies for the purpose of supervising and coordinating their inter-actions. It does not hold for councils in which membership is mandated by the vertical system, eg, the Cooperative Area Manpower Planning System (CAMPS).

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